Patent claims

1. Ferrite core for a transformer with the features:
two side parts (S, S') flank a middle bleb (MB) on both sides in a symmetric arrangement, they have the same length as the middle bleb given a ferrite core without an air gap or, given a ferrite core with an air gap, differ by its width from the length of the middle bleb, and extend along the longitudinal axis (L) of the ferrite core (FK) with a respectively constant cross-section, an end piece (ES) transversely arranged relative to the longitudinal axis connects the middle blebs and side parts such that the lower edges of the middle blebs and side parts are situated in a plane parallel to a later attachment plane (BE), the middle bleb has an oval cross-section without edges or corners, which has its longest extent vertically to the attachment plane,
the core is symmetrically structured with respect to a mirror plane (SE), which contains the longitudinal axis and vertically resides relative to the attachment plane.

2. Ferrite core according to claim 1,
wherein the inwardly facing surfaces (SF) of the side parts (S, S') follow the oval cross-section of the middle bleb (MB) in a predominately constant distance and form a hollow space for accepting a winding body (SK).

3. Ferrite core according to claim 1 or 2,
wherein the side parts (S, S') above the attachment plane (BE) are higher than the middle bleb (MB).

4. Ferrite core according to one of the claims 1 to 3,
wherein the hollow space, which is formed by the side parts (S, S') and which accepts the winding body (SK), has a maximum opening toward the bottom regarding the attachment plane (BE) and is mainly closed or entirely closed toward the top.

5. Ferrite core according to claim 1,

fashioned as an EP core having a rectangular circumference parallel to the attachment plane (BE) and cubic outside measurements.

6. Ferrite core according to one of the claims 1 to 5,
wherein the longest diameter of the oval cross-section of the middle bleb (MB) corresponds to the 1.2 to 5.0 times of the shortest diameter.

7. Ferrite core according to one of the claims 1 to 6,
which is symmetrically structure with respect to a mirror plane vertically residing relative to the attachment plane and the longitudinal axis.

8. Transformer with a ferrite core according to one of the claims 1 - 7, wherein the magnetic circuit in the core is closed with the aid of two core halves that are equally or similarly structured or with the aid of a second end piece and wherein a coil body (SK) with at least one winding is arranged above the middle bleb.

9. Utilization of a ferrite core according to one of the previous claims in a transformer for transmitting signals.

10. Utilization of a ferrite core according to one of the previous claims for a xDSL application as transformer for the impedance adaptation and for the insulation.

11. Utilization of a ferrite core according to one of the previous claims with the outer measurements of an EP 10 core instead of a traditional EP 13 core.